



RECEIVED
JAN 29 2002
TECH CENTER 1600/2900

SEQUENCE LISTING

<110> Mirkin, Chad A.
Letsinger, Robert L.
Mucic, Robert C.
Storhoff, James J.
Elghanian, Robert
Taton, Thomas A.

<120> NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO
AND USES THEREFOR

<130> 00-713-i9

<140> 09/973,638

<141> 2001-10-10

<150> 09/603,830

<151> 2000-06-26

<150> 09/344,667

<151> 1999-06-25

<150> 09/240,755

<151> 1999-01-29

<150> PCT/US97/12783

<151> 1997-07-21

<150> 60/031,809

<151> 1996-07-29

<150> 60/200,161

<151> 2000-04-26

<160> 64

<170> Microsoft Word 2000

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 1

aaacgactct agcgcgtata

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random

synthetic sequence

<400> 2
atggcaacta tacgcgctag 20

<210> 3
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 3
ccttgagatt tccctc 16

<210> 4
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 4
gagggaaatc tcaagg 16

<210> 5
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 5
aacttgcgct aatggcga 18

<210> 6
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 6
aagttgcgct ttacggctaa tggcga 26

<210> 7

<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 7
tctccttccc ttttc 15

<210> 8
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 8
gaaaagggaa ggaga 15

<210> 9
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 9
cttttcctt cctct 15

<210> 10
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 10
aaacgactct agcgcgtata gttgccat 28

<210> 11
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 11
 atggcaacta tacgcgctag agtcgttt 28

<210> 12
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 12
 cctatcgacc atgct 15

<210> 13
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 13
 agcatggtcg ataggaaacg actctagcgc 30

<210> 14
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 14
 gcgctagagt cgttt 15

<210> 15
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 15
 agcatggtcg ataggatggc aactatacgc 30

<210> 16
 <211> 24

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 16
gtcgatagga aacgactcta gcgc 24

<210> 17
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 17
agcatggttg ataggaaacg actctagcgc 30

<210> 18
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 18
agcatgtttg ataggaaacg actctagcgc 30

<210> 19
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 19
tctcaactcg ta 12

<210> 20
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 20
cgcatcagg at 12

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 21
tacgagttga gagagtgtcc acat 24

<210> 22
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 22
tacgagttga gaatcctgaa tgcg 24

<210> 23
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 23
tacgagttga gaatcctgaa tgct 24

<210> 24
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 24
tacgagttga gactcctgaa tgcg 24

<210> 25
<211> 23
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 25

tacgagttga gaatcctgaa tgc

23

<210> 26

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 26

tacgagttga gacatcctga atgcg

25

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 27

tacgagttga gaatcctgaa tgcg

24

<210> 28

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 28

taggacttac gc

12

<210> 29

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 29

tacgagttga gaccgttaag acgaggcaat catgcaatcc tgaatgcg

48

<210> 30

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 30

tgcatgattg cctcgtctta acgg

24

<210> 31

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 31

tacgagttga gaccgttaag acgaggcaat catgcatata ttggacgctt tacggacaac 60
atcctgaatg cg 72

<210> 32

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 32

gttgtccgta aagcgtccaa tatatgcatg attgcctcgt cttaacgg

48

<210> 33

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 33

tctcaactcg ta

12

<210> 34

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 34

tacgagttga gaatcctgaa tgcg

24

<210> 35

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 35

cgcattcagg at

12

<210> 36

<211> 141

<212> DNA

<213> anthrax

<400> 36

ggcggatgag tcagtagtta aggaggctca tagagaagta attaattcgt caacagaggg 60
attattgtta aatattgata aggatataag aaaaatatta tccagggtta tattgtagaa 120
attgaagata ctgaagggt t 141

<210> 37

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 37

taacaataat ccctc

15

<210> 38

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 38

atccttatca atatt

15

<210> 39
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 39
 tgagcctcct taactactga ctcacccgcc 30

<210> 40
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 40
 tgttgacgaa ttaattactt ctcta 25

<210> 41
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 41
 tataaccctg gataatattt ttcttat 27

<210> 42
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 42
 aagcccttca gtatcttcaa tttctacaa 29

<210> 43
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 43
tctcaactcg taaaaaaaaa aa 22

<210> 44
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 44
tacgagttga gaatcctgaa tgcg 24

<210> 45
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 45
aaaaaaaaaa cgcattcagg at 22

<210> 46
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 46
tctcaactcg taaaaaaaaa aa 22

<210> 47
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 47
aaaaaaaaaa cgcattcagg at 22

<210> 48
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 48
 tacgagttga gaatcctgaa tgcg

24

<210> 49
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 49
 ctacttagat ccgagtgccc acat

24

<210> 50
 <211> 12
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 50
 cgcattcagg at

12

<210> 51
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random
 synthetic sequence

<400> 51
 aaaaaaaaaa aaaaaaaaaa cgcattcagg at

32

<210> 52
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:random

synthetic sequence

<400> 52
cgcatcagg atwwwwwwww wwwwwwwwww ww 32

<210> 53
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 53
atcctgaatg cg 12

<210> 54
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 54
atcctgaatg cg 12

<210> 55
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 55
aaaaaaaaaa aaaaaaaaaa 20

<210> 56
<211> 27
<212> DNA
<213> Anthrax

<400> 56
ggattattgt taattattga taaggat 27

<210> 57
<211> 12
<212> DNA
<213> Anthrax

<400> 57
taacaatnat cc 12

<210> 58
<211> 15
<212> DNA
<213> Anthrax

<400> 58
atccttatca atatt 15

<210> 59
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 59
tctcaactcg ta 12

<210> 60
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 60
tacgagttga gaatcctgaa tgcg 24

<210> 61
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random
synthetic sequence

<400> 61
gcgtaagtcc taacgtacta acggagcaga attgccagag ttgagcat 48

<210> 62
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:random

synthetic sequence

<400> 62

gcgtaagtcc tacaacaggc atttcgcagg ttatatacgt actaacggag cagaattgcc 60
agagttgagc at 72

<210> 63

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 63

tgcattgattg cctcgtctta acgg 24

<210> 64

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:random
synthetic sequence

<400> 64

gttggtccgta aagcgtccaa tatatgcatg attgcctcgt cttaacgg 48